

Philippines

Preferred Energy Inc. and Winrock International



39% of the population (2,917,000 households) remain without access to the power grid

Renewable Energy in the Philippines

- The Philippine Energy Plan 1996-2025 predicts that over the plan period, total energy requirements of the Philippines will increase to an annual average of 6.6%.
- The Philippine Department of Energy projects that by 2025 renewable energy will account for 15% of the total energy mix.
- In 1996, geothermal and hydropower provided 9.5% and 14%, respectively, of the electricity generating capacity in the Philippines.
- Preferred Energy, Inc. (PEI), a Philippine NGO, is working to promote renewable energy development, support project development, and provide and facilitate debt and equity financing for RE projects.
- PEI, Sibol ng Aghan at Teknolohiya (SIBAT), and other partners are developing a Village Power Fund to provide loan financing for village electrification and productive projects employing renewable energy.



Panels installed by Solar Electric Company generate electricity to power a radio repeater station at the Regional Health Center of the Department of Health in Ormoc, Leyte

Solar PV Dissemination Project

- Solar Electric Company, Inc.
- Solar PV Dissemination Project
- Began in 1997
- Offices in Metro Manila, Iloilo, Pangasinan, Palawan, Cebu, Bacolod, La Union, and Davao
- Solar home systems, PV powered water pumping projects, refrigeration, telecommunications, and electrification for municipal buildings and offices
- P\$4.6 million.



A view of the micro-hydro plant



Tourists wade in ankle-deep water as they enjoy meals in the soothing ambiance of water cascading from the dam.

Rehabilitation and Expansion of a Micro-Hydro Facility

- Villa Escudero Plantations & Resort, Inc. (VEPRI)
- Rehabilitation and expansion of its micro-hydro facility, increasing capacity from 75 kW to 172.8 kW
- Began in 1997
- Villa Escudero, one of the most visited tourist spots in the country, is two hours from Metro Manila
- Added two micro-hydro plants of 62 kW and 35.8 kW, which enabled them to maximize exploitation of hydro resources within the estate with no negative environmental results
- P\$10.5 million.

Rice-Husk Fired Grain Dryers

- Pasig Agricultural Development & Industrial Supply Corp.
- Continuous-flow rice-husk fired grain dryer
- Began in 1994
- Being used by medium- and large-scale commercial grain processing centers all over the Philippines
- The furnace creates a cyclonic motion of the rice husk fuel inside the combustion chamber while burning, separating ash that can be sold while mitigating against traditionally-used, environmentally damaging fuel oil
- A typical 8-t/hr grain-drying plant: about P\$5,275,000.



Traditional and value added: rice-hull waste that formerly had to be burned or dumped can be transformed into reduced electricity expenses and a new income stream for rice millers.

